



PATENTS
112056-0123
P01-1572

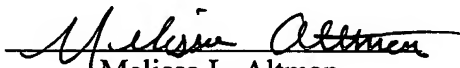
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re The Application of:)	
Robert L. Fair et al.)	
)	Examiner: Not yet assigned
Serial No.: 10/705,470)	
)	
Filed: November 10, 2003)	Art Unit: 2184
)	
For: METHOD FOR DETECTING)	
LEAKED BUFFER WRITES)	
ACROSS WAFL CONSISTENCY)	
POINTS)	

Cesari and McKenna, LLP
88 Black Falcon Avenue
Boston, MA 02210
June 24, 2005

CERTIFICATE OF MAILING

I hereby certify that the following Information-Disclosure Statement is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 24, 2005.


Melissa L. Altman

Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

INFORMATION-DISCLOSURE STATEMENT

In keeping with the duty of candor and good faith owed to the Patent and Trademark Office, Applicants wish to bring to the Examiner's attention the references listed on the accompanying form PTO-1449. A copy of each listed reference is enclosed.

To the extent required by 37 C.F.R. §1.98(a)(3), Applicants have described what they consider to be the relevance of any foreign-language reference. The Office may find additionally relevant material in these or other references.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Duane H. Dreger", is written over a horizontal line.

Duane H. Dreger
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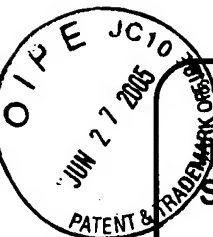
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 5

Complete if Known

Application Number	10/705,470
Filing Date	November 10, 2003
First Named Inventor	Robert L. Fair et al.
Group Art Unit	2184
Examiner Name	Not yet assigned
Attorney Docket Number	112056-0123

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	Re. 34,100		Hartness	10-13-1992	
	2	4,156,907		Rawlings, et al.	05-29-1979	
	3	4,399,503		Hawley	08-16-1983	
	4	4,598,357		Swenson et al.	07-01-1986	
	5	4,688,221		Nakamura et al.	08-18-1987	
	6	4,698,808		Ishii	10-06-1987	
	7	4,761,785	B1	Clark et al.	08-02-1988	
	8	4,805,090		Coogan	02-14-1989	
	9	4,837,675		Bean et al.	06-06-1989	
	10	4,864,497		Lowry et al.	09-05-1989	
	11	4,896,259		Jacobs et al.	01-23-1990	
	12	4,899,342		Potter et al.	02-06-1990	
	13	4,989,206		Dunphy, Jr. et al.	01-29-1991	
	14	5,124,987		Milligan et al.	06-23-1992	
	15	5,155,835		Belsan	10-13-1992	
	16	5,426,747		Weinreb et al.	06-20-1995	
	17	5,581,724		Belsan et al.	12-03-1996	
	18	6,636,879	B1	Doucette et al.	10-21-2003	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	19	WO	89/10594		Krakauer, Arno	11-02-1989		

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Sheet 2 of 5

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First Named Inventor	Robert L. Fair et al.
Group Art Unit	2184
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Attorney Docket Number	112056-0123

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	20	Administration Guide found at http://www.openafs.org/pages/doc/AdminGuide/auagd010.htm , visited on 3/2/2005	
	21	BASILICO, ET AL., <i>Error Correction System Using "Shadow Memory,"</i> IBM Technical Disclosure Bulletin, May 1984, pp. 5792-5793	
	22	BITTON, DINA, <i>Disk Shadowing</i> , Proceedings of the 14 th VLDB Conference, LA, CA (1988)	
	23	BLASGEN, M.W. ET AL., <i>System R: An architectural Overview</i> , Reprinted from IBM Systems Journal Vol. 20, no. 1, 1981©1981, 1999	
	24	BORENSTEIN, NATHANIEL S., <i>CMU's Andrew project a retrospective</i> , Communications of ACM, (39)12, December 1996	
	25	BROWN, MARK R. ET AL., <i>The Alpine file system</i> , ACM Transactions on Computing Systems, 3(4):261--293, November 1985	
	26	CHEN, PETER M., ET AL., <i>An Evaluation of Redundant Arrays of Disks Using an Amdahl 5890</i> Performance Evaluation, pp. 74-85, 1990	
	27	CHUTANI, SAILESH, ET AL., <i>The Episode file system</i> , In Proceedings of the USENIX Winter 1992	
	28	CLARK, B.E., ET AL., <i>Application System /400 Performance Characteristics</i> , IBM Systems Journal, 28(3): 407-423, 1989	
	29	Data Sheet for the Check Point Software Technologies product Flood-Gate-1 (1997)	
	30	DIBBLE, PETER C., ET AL., <i>Beyond Striping: The Bridge Multiprocessor File System</i> , Computer Science Department, University of Rochester, Aug. 11, 1989	
	31	DOUGLIS, FRED, ET AL., <i>A comparison of two distributed systems: Amoeba and Sprite</i> - Computing Systems, 4(4), Fall 1991, pp. 353-385 ?{copy of article I have has no date or cite}	
	32	GAIT, JASON, <i>Phoenix: A Safe In-Memory File System</i> , Communications of the ACM, 33(1):81--86, January 1990	
	33	HARTMAN, JOHN H. ET AL., <i>Performance Measurements of a Multiprocessor Sprite Kernel</i> , Proceedings of the USENIX Conference, 1990	
	34	HITZ, DAVE ET AL., <i>File System Design for an NFS File Server Appliance</i> , Technical Report 3002, Rev. C395, presented Jan. 19, 1994	

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	35	HOWARD, JOHN H, ET AL. <i>Scale and Performance in a Distributed File System</i> , Carnegie Mellon University, CMU-ITC-87-068, Aug. 5, 1987	
	36	HOWARD, JOHN, H. ET AL., <i>Scale and performance in a distributed file system</i> , ACM Trans. Computer. System., 6(1), Feb. 1988 pp. 51-81	
	37	HOWARD, JOHN H., <i>An Overview of the Andrew File System</i> , Carnegie Mellon University, CMU-ITC-88-062	
	38	<u>The IBM System/38</u> , Chapter 8, pp. 137-15	
	39	ISOMAKI, MARKUS, <i>Differentiated Service for the Internet</i> , Department of Technical Physics and Mathematics, May 9, 1998	
	40	KAZAR, MICHAEL L., ET AL., <i>Decorum File System Architectural Overview</i> , USENIX Summer Conference, Anaheim, California, 1990	
	41	LOMET, DAVID., ET AL., <i>The performance of a multiversion access method</i> , ACM SIGMOD International Conference on Management of Data, 19:353-363	
	42	LORIE, RAYMOND, A., <i>Physical integrity in a large segmented database</i> , ACM Trans. Database Systems, (2)1: 91-104, March 1977	
	43	LORIE, RA, <i>Shadow Page Mechanism</i> , IBM Technical Disclosure Bulletin, June 1986, pp. 340-342	
	44	MCKUSICK, MARSHALL KIRK, ET AL., <i>A Fast File System for UNIX</i> , Computer Science Division, Department of Electrical Engineering and Computer Sciences, Univ. of CA, Berkley, Feb. 18, 1994	
	45	MILLER, ETHAN L., ET AL., <i>RAMA: A File System for Massively Parallel Computers</i> , 12 th IEEE Symposium on Mass Storage Systems, Monterey CA, April 1993, pp. 163-168	
	46	MOONS, HERMAN ET AL., <i>Location-Independent Object Invocation in Open Distributed Systems</i> , Autumn 1991 EurOpen Technical Conference and Exhibition, pp. 287-300 (September 16-20, 1991)	
	47	MORRIS, JAMES H., Et Al, <i>Andrew: A Distributed Personal Computing Environment</i> , Comm. of the ACM, vol. 29, March 1986, pp 184-201	
	48	MULLENDER, SAPE J., ET AL., <i>A distributed file service based on optimistic concurrency control</i> , ACM Symposium on Operating System Principles (Orcas Island, Washington). Published as Operating Systems Review, 19(5):51-62, December 1985	
	49	MULLER, KEITH, ET AL., <i>A High Performance Multi-Structured File System Design</i> , In Proceedings of the 13th ACM Symposium on Operating Systems Principles, October 1991, pp. 56-67	

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Sheet	4	of	5
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	47	MORRIS, JAMES H., ET AL, <i>Andrew: A Distributed Personal Computing Environment</i> , Comm. of the ACM, vol. 29, March 1986, pp 184-201	
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	49	MULLER, KEITH, ET AL., <i>A High Performance Multi-Structured File System Design</i> , In Proceedings of the 13th ACM Symposium on Operating Systems Principles, October 1991, pp. 56-67	
	50	OUSTERHOUT, JOHN K. ET AL., <i>The Sprite Network Operating System</i> , Computer Science Division, Department of Electrical Engineering and Computer Sciences, Univ. of CA, Berkley, Nov. 19, 1987	
	51	OUSTERHOUT, JOHN ET AL., <i>Beating the I/O Bottleneck: A Case for Log-Structured File Systems</i> , Technical Report, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley, October 30, 1988	
	52	OUSTERHOUT, JOHN, <i>Why Aren't Operating Systems Getting Faster as Fast as Hardware?</i> , Digital WRL Technical Note TN-11, October 1989	
	53	OUSTERHOUT, JOHN, <i>A Brief Retrospective On The Sprite Network Operating System</i> , found at http://www.cs.berkeley.edu/projects/sprite/retrospective.html , visited on 3/11/2005	
	54	PATTERSON, D., ET AL., <i>A Case for Redundant Arrays of Inexpensive Disks (RAID)</i> , Technical Report, CSD-87-391, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley (1987)	
	55	PATTERSON, D., ET AL., <i>A Case for Redundant Arrays of Inexpensive Disks (RAID)</i> , SIGMOD International Conference on Management of Data, Chicago, IL, USA, 1-3 June 1988, SIGMOD RECORD (17)3:109-16 (Sept. 1988)	
	56	PETERSON, ZACHARY NATHANIEL JOSEPH, <i>Data Placement for Copy-on-Write Using Virtual Contiguity</i> , University of CA, Santa Cruz, Master of Science in Computer Science Thesis, September 2002	
	57	QUINLAN, SEAN, <i>A Cached WORM File System</i> , Software-Practice and Experience, 21(12):1289-1299 (1991)	
	58	Redundant Array of Independent Disks, from Wikipedia, the free encyclopedia, found at http://en.wikipedia.org/wiki/RAID , visited on 3/9/2005	
	59	ROSENBERG, J., ET AL., <i>Stability in a Persistent Store Based on a Large Virtual Memory</i> , In Security and Persistence, Rosenber, J. & Keedy, J.L. (ed), Springer-Verlag (1990) pp 229-245	
	60	ROSENBLUM, MENDEL, ET AL., <i>The LFS Storage Manager</i> , Computer Science Division, Electrical Engin. And Computer Sciences, Univ. of CA, presented at Summer '90 USENIX Technical Conference, Anaheim, CA June 1990	

Examiner Signature		Date Considered	
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	61	ROSENBLUM, MENDEL, ET AL., <i>The Design and Implementation of a Log-Structured File System</i> July 24, 1991 pp1-15.	
	62	ROSENBLUM, MENDEL, ET AL., <i>The Design and Implementation of a Log-Structured File System</i> , In Proceedings of ACM Transactions on Computer Systems, (10)1:26-52, February 1992	
	63	SANDBERG, RUSSEL ET AL., <i>Design and implementation of the Sun Network Filesystem</i> . In Proc. Summer 1985 USENIX Conf., pages 119-130, Portland OR (USA), June 1985	
	64	SANTRY, DOUGLAS S., ET AL., <i>Deciding When to Forget in the Elephant File System</i> , Operating Systems Review, 34(5), (Dec. 1999) pp.110-123	
	65	SATYANARAYANAN, M., ET AL., <i>The ITC Distributed File System: Principles and Design</i> , In Proceedings of the 10th ACM Symposium on Operating Systems Principles, (19)5:56-67, December 1985	
	66	SATYANARAYANAN, M., <i>A survey of distributed file-systems</i> . Annual Review of Computing Science, 4(73-104), 1989	
	67	SATYANARAYANAN, M., ET AL., <i>Coda: A highly available file system for a distributed workstation environment</i> Carnegie Mellon University, CMU-ITC	
	68	SATYANARAYANAN, M., ET AL., <i>Coda: A highly available file system for a distributed workstation environment</i> . IEEE Transactions on Computers, 39(4):447-459, 1990	
	69	SATYANARAYANAN, MAHADEV, <i>Scalable, Secure, and Highly Available Distributed File Access</i> , Computer May 1990: 9-21	
	70	SIDEBOTHAM, BOB, <i>Volumes: The Andrew File System Data Structuring Primitive</i> , EEUG Conference Proceedings, Manchester, UK, Autumn 1986	
	71	User Guide found at http://www.openafs.org/pages/doc/UserGuide/auusg004.htm , visited on 3/2/2005	
	72	WELCH, BRENT B., ET AL., <i>Pseudo Devices: User-Level Extensions to the Sprite File System</i> , Computer Science Division, Department of Electrical Engineering and Computer Sciences, Univ. of CA, Berkley, April 1988	
	73	WELCH, BRENT B., ET AL., <i>Pseudo-File-Systems</i> , Computer Science Division, Department of Electrical Engineering and Computer Sciences, Univ. of CA, Berkley, Oct. 1989	
	74	WITTLE, MARK, ET AL., <i>LADDIS: The next generation in NFS file server benchmarking</i> , USENIX Association Conference Proceedings, April 1993.	

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